



NOVITATES ZOOLOGICAE

Vol. XXXIII.

MARCH 1926.

No. 1.

NEW GEOMETRIDAE

By LOUIS B. PROUT, F.E.S.

SUBFAM. OENOCHROMINAE.

1. *Celerena mitis melanoprora* subsp. n.

♂♀. Near *C. m. evitans* Prout (1916), from the Solomons. Palpus with 2nd joint predominantly black, only at base yellow (in the other races predominantly yellow). Thorax with a blackish anterior band well developed (in a few *m. evitans* from Bougainville feebly developed, otherwise wanting is *m. evitans* and *m. mitis*). Abdomen with some black-grey maculation. Both wings with the black markings on an average broader than in *m. evitans* (but variable in that race).

Bismarek Archipelago : New Britain (*loc. typ.*) ; New Ireland ; New Hanover ; Rook Island ; Admiralty Islands.

SUBFAM. HEMITHEINAE.

2. *Aeolochroma prasina defasciata* subsp. n.

♂. Forewing with basal patch in its anterior half less developed, generally more mixed on SC with bluish-white scales and with a subbasal admixture of these scales at costa ; antemedian line with the inward projection near costa generally lengthened ; median area broadened, especially posteriorly, largely remaining green, only with a narrow dark (red- and black-mixed) band proximally, some dark admixture posteriorly and some bluish-white admixture between M^2 and SM^2 ; postmedian line generally rather more sharply angled at R^1 , weakly angled at R^3 ; the red-brown, black-mixed band beyond well developed, almost as in *p. spadicocampa* Prout (1917), but less bright.—Hindwing with the dark mark on DC^2 strong, the praesubterminal markings generally weak.

Forewing beneath with the white mark in cellule 4 between cell-dot and postmedian clear and rather sharply defined.

♀. Similarly distinguishable by the form of the median band ; the white subcostal admixture generally strong, including a rather pronounced white mark just outside the anterior indentation of the postmedian. Forewing beneath with the white mark in cellule 4 as in the ♂.

Bismarek Archipelago : Rook Island, 1 ♂ ; New Britain (*loc. typ.*), 8 ♂♂, 2 ♀♀ ; New Ireland, 3 ♂♂, 1 ♀ ; New Hanover, 2 ♂♂, 1 ♀.

Except for the rather less bulged termen and the lack of abrupt inward

posterior curve of the postmedian, this more recalls *viridimedia* Prout (1916) than any hitherto known race of *prasina*, unless possibly the smaller *p. spadicocampa* of Biak.

3. *Terpna iterans* sp. n.

♂, 58 mm. Near *superans* Butl. (1878). Face narrowly pale beneath as well as above. Palpus predominantly pale.

Wings somewhat paler than in *superans*, at least in median area, the markings of upperside at first sight more suggestive of *vigens* Butl. or the *erionoma* Swinh. group.—*Forewing* with a fine subbasal line, thickening a little at costa; antemedian much heavier (except at costa) than in *superans*, fairly equal in development throughout; postmedian more distally placed than in that species, heavier, complete (not so broken into vein-dots); pale subterminal obsolete.—*Underside* less suffused with ochreous proximally, the heavy longitudinal blackish streaks wanting, the straightish, oblique antemedian of upperside faintly reproduced; cell-spots less large and round than in *superans*, that of the forewing being slightly concave on outside, that of the hindwing relatively long and narrow; subterminal row of spots not double, only the elongate, confluent pair in cellules 4 and 5 of the hindwing suggesting a possible confluence of two in each of the cellules named.

China: district of Shanghai, type in coll. L. B. Prout, kindly presented by M. l'Abbé J. de Joannis, paratype in his collection.

4. *Thalassodes progressa* sp. n.

♂, 26–29 mm.; ♀, 27–34 mm. Face dull brown-red. Palpus in ♂ $1\frac{1}{2}$, in ♀ just over 2; red on outside, white beneath. Vertex white; occiput green. Hindtibia in ♂ with slender hair-pencil.

Wings shaped about as in the common *T. digressa* Walk. Ground-colour duller and more bluish green, with similar white irroration and strigulation, but with the lines extremely fine and almost obsolete; costal edge of forewing similarly ochreous; hindwing with more pronounced white on DC, though a little interrupted in the middle; faint suggestions of a dark terminal line; fringes pale ochreous, somewhat mixed with green proximally.

Madagascar: Diego Suarez, March–July, 17 ♂♂, 7 ♀♀ (G. Melou). Type in coll. Tring Museum.

A larger ♂ from Nabagulo Forest, 15 miles from Kampala, Uganda, October 25–November 6, 1921 (W. Feather), shows similar structure and probably represents a race, but had better await more material from Continental Africa. *T. digressa* lacks the tibial pencil.

5. *Prasinocyma nonyma* nom. n.

Prasinocyma eichhorni Prout, *Nor. Zool.* xxxii. 35 (1925) (nec *Nor. Zool.* xxvii. 267, 1920).

By a very inexcusable oversight, I overlooked that I had already dedicated to the Eichhorn brothers a New Guinea species in this extensive genus. A new name therefore becomes necessary for the New Ireland species described 5 years later.

6. *Prasinocyma loveridgei* sp. n.

♂, 17–18 mm. Head and front of thorax whitish, slightly mixed with fuscous. Palpus scarcely $1\frac{1}{4}$, 2nd joint rough-sealed, especially above, where

the scales project obliquely forward, 3rd joint short but distinct; whitish, the 2nd joint darkened on outside. Antennal shaft somewhat infuscated, the longest pectinations about 4, apical third or more not pectinated. Thorax above predominantly fuscous, abdomen above more whitish, sprinkled with blackish-fuscous; both beneath whitish. Hindtibia dilated, with hair-pencil and with a terminal process reaching to near end of 1st tarsal joint; tarsus rather short.

Forewing with cell at least $\frac{1}{2}$, DC curved, SC¹ well free, R¹ connate or stalked, R² from little before middle, M¹ connate or shortly stalked; dirty white, with copious but irregular dark irroration; costa spotted; cell-mark black, crescentic, strongest on DC²; ill-defined red-brownish clouding over a great part of the wing, occupying the proximal half excepting a vague antemedian band between M² and SM² and reappearing in a slightly incurved band (in the middle interrupted) from costa midway between cell-mark and termen to hindmargin close to tornus; some blacker marking on this band near costa; terminal spots black, interneural, slightly elongate; fringe very weakly chequered.—*Hindwing* with termen almost rounded; C closely approximated to about middle of cell, then rapidly diverging, R² as on forewing, M¹ shortly stalked; whitish, the irroration slight and sparse; a rather thin, rather elongate cell-mark; terminal spots indicated.

Both wings beneath nearly as hindwing above, the forewing, however, with costa spotted and anterior part (except distally) slightly suffused.

Tanganyika Territory: Kongasa, April 23, 1917 (A. Loveridge), 2 ♂♂ in coll. Tring Museum.

Near *perpulverata* Prout (1916), rather broader-winged, much less uniformly dusted. Possibly a race, as a ♀ *perpulverata* ab. *subfasciata* from Kenya Colony (April 1922) resembles it in the less uniform irroration.

7. *Metallochlora impotens* sp. n.

♂, 25–27 mm. Face orange-red. Palpus slightly over 1; red on outside, whitish beneath. Vertex white. Antenna pectinate, the branches very short (about 1); light-brown, at base white. Thorax and abdomen white, tinged with green above; abdominal crest almost entirely obsolete. Foreleg tinged with red, especially the coxa; hindtibia strongly dilated, with hair-pencil and slight terminal process; terminal spurs short; tarsus very short.

Forewing with termen bowed, moderately oblique; SC¹ generally anastomosing slightly with C, sometimes free, SC² shortly before SC³, R¹ connate or just stalked, M¹ connate or just separate; whitish green, about as average captured *Iodis lactearia* Linn.; costal edge narrowly buff; traces of a cloudy white antemedian; a broad white postmedian, tapering a little anteriorly, here gently incurved, not quite reaching costa, from R² to M² rather more oblique than termen, at hindmargin about vertical; fringe concolorous, at tips whiter.—*Hindwing* rather broad for the genus, the angle at R² moderate; SC² shortly stalked, M¹ shortly stalked; concolorous with forewing; a broad, strongly curved postmedian white line (band) about 3 mm. from termen.

Underside whitish, the buff costal edge of forewing rather broader, at least at base; frenulum dark-coloured.

N.E. Madagascar: Diego Suarez, February–April 1917, 7 ♂♂ (the type dated March 4); Kulau, 1 ♂. All in coll. Tring Museum, collected by G. Melou.

Some specimens show indications of a darker cell-dot on each wing. The inclusion of the present and another similarly pectinated Diego Suarez species (1 ♂, worn, facies of a white, well-banded *glacialis* Butl.) in *Metallochloa* will involve a slight change in my Key (*Gen. Ins.* cxxix. 16, no. 56), but seems justifiable; the general habitus, genitalia, etc., would clearly place them in this group rather than in *Antharmostes* or *Prasinocyma*.

8. *Hemistola hypnopoea* sp. n.

♂, 20-27 mm.; ♀, 24-30 mm. Face red. Palpus slightly over 1, slender, 2nd joint with some sparse, slender, long-projecting hair-scales above and beneath (easily lost), 3rd joint distinct, though small; outside reddish. Tongue well-developed, but slender. Antenna in ♂ with pectinations short (scarcely 2); in ♀ not pectinate. Vertex white; occiput greenish. Thorax and abdomen pale green above, whitish beneath. Hindtibia in ♂ dilated, with hair-pencil.

Forewing with SC¹ anastomosing with C, M¹ separate; dull pale yellowish-green, recalling *Nothoterpna* or *Acollesis*; costal edge very narrowly pale buff; lines white, obsolete at costa; antemedian slender, curved; postmedian less slender, mostly straightish, about 3 mm. from termen, anteriorly curving inward before becoming obsolete.—*Hindwing* with termen rounded, rather full; C approximated to cell near base only, rapidly diverging; R² rather extreme, M¹ separate; concolorous with forewing; postmedian line continued, little beyond middle of wing, varying from almost straight to curved nearly parallel with termen.

Underside whiter, the forewing, however, generally strongly shaded with dirty yellow-greenish except at distal and hind margins.

N.E. Madagasear: Diego Suarez, mostly February-April, 25 ♂♂, 6 ♀♀ (*loc. typ.*); Kulau, 2 ♂♂. Type in coll. Tring Museum.

The large specimens perhaps belong to a separate brood as the two largest ♀♀ are dated December 24 and January 8, but the only large ♂ is undated. None are in perfect condition and they probably fade in relaxing.

SUBFAM. STERRHINAE.

9. *Scopula aspiciens* sp. n.

♂♀, 19-24 mm. Face black. Palpus black, beneath whitish. Vertex white. Antennal shaft at base white, then more or less heavily spotted with black; joints in ♂ slightly projecting, ciliation fully 1. Thorax and abdomen concolorous with wings; abdomen often (especially in the ♂) with blackish dorsal dots or small spots. Foreleg more or less infuscated on upper- and inner-side; hindtibia in ♂ long, with moderate white hair-pencils, the tarsus scarcely $\frac{2}{3}$.

Forewing slightly narrower than in average *Scopula*; whitish, generally very densely (often almost throughout) irrorated with fleshy reddish, but sometimes remaining pale, thus very variable in colour; a small black cell-dot, almost always partly ringed with grey scales and with a noticeable white spot between it on the median shade; median shade generally rather thick, mixed red and grey (in varying proportion), a little beyond the cell-dot, slightly excurved anteriorly, more markedly incurved between M² and SM²; lines weak, greyish, antemedian bent outward in cell, marked with three darker dots on veins; postmedian excurved near costa, incurved between radials and more slightly

between M^2 and SM^2 , slightly punctuated on the veins; subterminal whitish, weak, nearly parallel with postmedian; terminal dots small, black; fringe rather more highly coloured than wings.—*Hindwing* not very broad, termen only very slightly bent at R^3 ; cell-dot not ocellated; antemedian line wanting, median curved round innerside of cell-dot, angled outward at base of R^1 ; outer area much as on forewing.

Underside rather paler, much less reddish, the forewing in some specimens more or less suffused with grey; cell-dots and terminal dots distinct, on forewing also the median and postmedian lines.

Madagascar: Diego Suarez, February–September 1917 (G. Melou), a long series in coll. Tring Museum; Morondava, a rubbed ♂ in the same collection.

10. *Hamalia ligys* sp. n.

♂, 21–23 mm. Face brown, mixed with black. Vertex white. Occiput and front of thorax dusky brown. Antennal shaft white proximally, then mixed with blackish; ciliation 1 or slightly over. Thorax and abdomen concolorous with wings. Hindtibia with the usual pale hair-pencil; hindtarsus not so extremely abbreviated as in *nigromarginata* Dogn. (1890).

Wings shaped much as in *venipunctata* Warr. (*Proc. U.S. Nat. Mus.* xxx, 446), etc., coloured and marked almost as an aberration of the much larger *nigromarginata* Dogn. with the median shade less thick, more concise.—*Forewing* with costal edge narrowly blackened; cell-dot black; antemedian line fine, straightish; median shade faintly sinuous or almost straight, touching the outer side of, or almost crossing, the cell-dot; postmedian much as in *nigromarginata*, rather more equally developed throughout; terminal spots between the radials and at tornus rather large, the former broadly triangular; terminal line less thick and regular than in *nigromarginata*; fringe slightly infuscated and with darker spots.—*Hindwing* with sharp cell-dot, otherwise marked nearly as in *nigromarginata*.

Underside much as in *nigromarginata*.

Colombia: Cananche, Cundinamarca, September 1903 (M. de Mathan) type and two other ♂♂ in coll. Tring Museum. Peru: Palcazu and La Oroya (Rio Inambari) in coll. Tring Museum; Ucayali in coll. Dognin.

11. *Hamalia exempta* sp. n.

♂, 20 mm. Face blackish, slightly paler below. Palpus very short and slender, blackish brown. Antennal ciliation $1\frac{1}{2}$. Vertex white. Occiput and front of thorax dark brown; the rest of thorax and abdomen concolorous with wings. Hindtibia with long whitish pencil from femoro-tibial joint; tarsus slender, $\frac{2}{3}$ or slightly over.

Forewing with areole single, SC^1 stalked a little beyond; light pinkish cinnamon to pinkish buff, rather thinly and smoothly scaled; slight dark irroration; costal edge narrowly blackish brown; lines brownish grey; antemedian indistinct, very slightly excurved in cell, crossing extreme base of M^2 , very slightly incurved between this and SM^2 ; median line fine, almost straight, from costa slightly beyond middle to hindmargin at about $\frac{2}{3}$; cell-mark not strong, slightly proximal to median line; postmedian weakly sinuous, the outward curve about R^3 – M^1 perhaps the most noticeable; terminal line blackish,

slightly interrupted; fringe rather pale, dark-spotted.—*Hindwing* with SC^1 stalked for nearly half its length; first line wanting, the others more proximal than on forewing, the median fine, bent proximally to the cell-dot, the postmedian continuing the median of forewing, rather more markedly excurved between R^1 and M^2 than on forewing.

Underside more weakly marked, the hindwing paler.

Colombia: Yuntas, near Cali, type in coll. Dognin.

A rubbed ♀ from Salidero, N.W. Ecuador, 350 feet, March 1901, agreeing accurately in venation and apparently in markings, has stood unnamed in the Tring Museum; hindtibia with the outer proximal spur vestigial.

12. *Sterrha recrinita* sp. n.

♂, 18 mm. Head brown. Antenna with rather long fascicles of cilia ($1\frac{1}{2}$ or over). Thorax and abdomen drab, beneath slightly paler and more brownish. Midleg long, the tibia throughout with a fringe of long, buff-tinted hair. Hindleg short, the tibia with a pale pencil, the tarsus greatly aborted. Abdomen beneath with a rather long, pale pencil from near base.

Forewing with termen long, strongly oblique, tornal region rather ample; areole moderate, SC^1 from its apex or shortly stalked, SC^2 stalked a little beyond SC^1 ; costal region beneath (to beyond middle) with a fringe of rather long hair; glossy drab, with a slight shade of olive-brown; the gloss shown, with a strong lens, to be produced by a sprinkling of glistening leaden scales; costal margin more buff; cell-dot weak; lines obsolete.—*Hindwing* somewhat distorted, irregularly amygdaloid, its greatest length at M^1 , apex and tornus scarcely indicated, termen extremely convex; cell apparently extremely short and not or scarcely closed, SC^2 and R^1 long, medians stalked; mostly concolorous with forewing, in the abdominal region more tinged with buff.

Underside almost uniform drab, the hindwing mostly hairy, costa at base with a strong tuft, succeeded by a more ochreous patch of bristly scaling.

S.E. Peru: Rio Huacamayo, Carabaya, dry season, 3,100 feet, June 1904 (G. Ockenden), type and another ♂ in coll. Tring Museum. Bolivia: Rio Songo, 750 m. (Fassl), a rather rubbed ♂ in coll. Dognin; Buenavista (E. Bolivia), 750 m. (J. Steinbach), a damaged ♂ in coll. Tring Museum.

Rather near *S. prolixa* Schaus (*Ann. Mag. Nat. Hist* (8) xi. 353, as *Euacidalia*), the forewing more acute, the leg-tufts (not mentioned in original description) less red, etc.

13. *Sterrha (Pogonogya) scholaea* sp. n.

♂, 23 mm. Head orange-cinnamon. Body concolorous with wings.

Forewing with costal margin only curved near apex, termen scarcely curved, long; SC^1 free; pinkish buff, suffused—except near costal margin—with fawn; costal edge orange-cinnamon; cell-mark blackish; lines fine, somewhat as in *jugaria* Schaus (*Tr. Amer. Ent. Soc.* xxvii. 259), etc., the antemedian being indistinct, little curved, chiefly indicated by slight dark proximal shading, the postmedian vertical from costa about 3 mm. from apex, bent at R^1 , slightly incurved between this and R^2 , approximated to termen at medians, markedly inbent behind M^2 , then slightly thickened, closely approaching termen at SM^2 .—*Hindwing* with abdominal margin long, folded, with hair-pencil, termen

moderately curved; SC^2 rather shortly, M^1 very shortly stalked; concolorous with forewing, abdominal area rather more ochreous; cell-dot weaker; an indistinct, sinuous postmedian line (incurved between the radials, excurved before and behind), about twice as near to cell-dot as to termen; fringe more strongly irrorated towards tornus.

Underside less—that of hindwing scarcely—suffused with fawu; the cell-marks and on forewing the postmedian line indicated.

Colombia: Pacho, E. Cordillera, 2,200 m. (A. H. Fassl), type in coll. Dognin; Muzo, 400–800 m. (A. H. Fassl), paratypes in coll. Tring Museum, coll. Joicey, coll. L. B. Prout.

Larger than *rufulata* Warr. (1900), anal tufts apparently less developed, abdominal pencil long (from near base), *pale*; forewing with termen relatively longer, rather redder, cell-dot distincter, etc.

14. *Anisodes pauper celsa* subsp. n.

♂, 45–48 mm. Distinguished principally from the name-typical race (*pauper* Butl. 1887, Solomons) by its large size; further by a more rufescent tinge, rather dense dark irroration, appreciably darkened costal edge of forewing and more extended fleshy suffusion of forewing beneath, here leaving only a narrow distal border and rather broader posterior area pale. Varies extremely, like *p. pauper*, in the expanse of the black bordering of the cell-mark of hindwing.

New Britain: Talasea, March–April 1925 (A. F. Eichhorn), 2 ♂♂ in coll. Tring Museum.

SUBFAM. LARENTIINAE.

15. *Eois leucampyx* sp. n.

♂♀, 19–22 mm. Close to *amydroscia* Prout (1922), possibly a subspecies, though the ♂ antenna looks rather more compressed laterally. Face reddish, merely shading off gradually to yellowish below. Fillet and scaling of antennal shaft pure white. Tone slightly less yellow than in *amydroscia* (excepting a Pulo Lant race?); forewing with the proximal subterminal marks less equally developed, only with the one behind R^2 strong, the one in front smaller (in *amydroscia* this pair are approximately equal).

New Britain: Talasea, March–April 1925 (A. F. Eichhorn), 3 ♂♂, 1 ♀, in coll. Tring Museum.

A ♂ from Stephansort, N.E. New Guinea, seems to agree accurately, and single specimens from British New Guinea and Bougainville are probably aberrations or kindred races. From *sanguilineata* Warr. (1901), *leucampyx* differs in the possession of an areole, in having the forewing slightly broader, yet with sharper apex, the hindwing slightly more elongate to tornus, and in the less bright colouring, the purple markings being less strong and somewhat mixed with blackish.

16. *Xanthorhoë euthytoma* sp. n.

♂, 30 mm. Palpus nearly $1\frac{1}{2}$, broadly scaled. Antennal pectinations rudimentary (materially shorter than diameter of shaft), two pairs to each joint, surmounted by fascicles of cilia exceeding their own length. Head and body concolorous with wings.

Forewing rather broad, costa in distal half gently arched, apex not acute, termen almost smooth, eurved chiefly about middle, not very oblique; brownish fuscous, slightly rippled with whitish and darker fuscous; basal patch strongly, the rest of the wing more slightly mixed with neutral red; cell-dot black; basal patch not quite 2 mm., bounded by a slightly curved line; succeeding area scarcely paler than central band; central band moderately broad, with a pale tint in front of cell-dot, otherwise pretty uniform, its proximal edge waved, nearly vertical (slightly oblique inward) from costa to M close to base of M², where it bends weakly, thence running very slightly oblique inward to hindmargin; its distal edge almost straight, from costa at nearly 11 mm. to hindmargin at nearly 7 mm., succeeded by a triple white line; subterminal line white, very fine, very slightly interrupted, deeply but not quite regularly dentate, with some slight dark shading proximally, especially between the radials; terminal line more or less interrupted at and midway between the veins (in places forming paired black spots); fringe dark, especially proximally, with a whitish line at base, another at tips, and a third intermediate (slightly nearer to the latter).—*Hindwing* a little paler and greyer; cell-dot black; basal and central areas not differentiated; postmedian line rather more exurved in middle than on forewing, the succeeding white lines rather less distinct; subterminal vaguer than on forewing, especially anteriorly; terminal line and fringe as on forewing.

Underside pale lilac-buff with some grey suffusion, between cell-dots and postmedian with some wavy dark lines; cell-dots large, black; forewing with a black antemedian costal spot; both wings with postmedian line and indistinct whitish lines beyond; subterminal line ill-developed, but on both wings with dark proximal shades, a strong one anteriorly (almost black between the radials) and a rather less strong posteriorly, leaving cellule 3 pale; terminal line and fringe less sharply marked than above.

Nigeria: near Bamenda, 5,000–6,000 feet, August 1922, type in coll. L. B. Prout.

Near *ansorgei* Warr. (Nov. Zool. vi. 299), but with the subterminal line quite different, etc.

17. *Euphyia goniodes* sp. n.

♂, 32–34 mm. Intermediate between *subangulata* Koll. (1848) and *mediovittaria* Moore (1867). Fore- and midlegs above slightly darker (less white-irrorated) than in *mediovittaria*, the rings at ends of joints consequently more conspicuous.—*Forewing* with termen at least as oblique, apex very slightly more produced; proximal and distal areas rather less tinged with ochreous; markings of proximal area similar, the narrow brown band between basal patch and median fascia less bright brown; median fascia as broad as in *subangulata*, at costa broader, its distal edge being more oblique outward anteriorly to the radial concavity, its form otherwise similar to that of *subangulata*, its paler central part broad, its dark boundaries slightly less reddish than in the allies; subterminal line somewhat interrupted, slightly more lunulate than in *mediovittaria*.—*Hindwing* similar to that of *mediovittaria*, but with the termen rather straighter between C and R², the fringe less tinged with yellowish, rather more mottled with grey opposite the veins.

Underside much like that of *subangulata*.

Tibet: Chumbi Valley, 4 ♂♂ in coll. Tring Museum, the type and another

bearing the more exact locality Dopenri. Also from Kashmir Valley, 7,000 feet, 1 ♂ in coll. L. B. Prout.

18. *Atopophysa indistincta proximifascia* subsp. n.

♀, 35–38 mm. On an average larger than the corresponding sex of *i. indistincta* Butl. (1889).—*Forewing* slightly less dusky; subbasal line (narrow band) strongly blackened, almost straight; markings on median area quite as weak as in the name-typical race, but with the boundary-lines tending to blacken at costa and especially at hindmargin, the antemedian at hindmargin oblique outward.—*Hindwing*, except in distal area, paler than in *i. indistincta*.

Assam: Khasia Hills, February 1896, 9 ♀♀ in coll. Tring Museum.

19. *Coenotephria championi* sp. n.

♂, 34 mm. Head and body dark fuscous sprinkled with white; the white more dominant beneath. Face with developed cone. Palpus over $1\frac{1}{2}$; deep fuscous (almost black), beneath whitish. Antenna with joints projecting, ciliation almost 1. Anal tuft whitish drab.

Forewing with margins little curved, termen markedly oblique; general coloration as in *Euphyia variegata* Moore (*Proc. Zool. Soc. Lond.*, 1867, p. 653), the median band being predominantly blackish (rather less sharply than in that species), the areas on either side of it suffused with olive-green (fading to yellowish); basal area as dark as median, its whitish boundary-line slightly indented at both folds; intermediate band broad but very vague; median band much as in *E. variegata*, but with its distal edge indented rather than incurved on R^2 , little lobed behind this, running inward rather strongly to M^1 , so that the anterior half of the band looks more markedly broader than the posterior than in that species; a similarly large cell-spot; subterminal and terminal lines also similar, but the former scarcely filled in with dark shading except between the radials.—*Hindwing* dark grey, with weak white-grey lines (subterminal and double postmedian) as in *E. variegata*.

Underside rather less brown than in *E. variegata* with rather less sharp contrasts, the whitish apical and midterminal spots of forewing being absent, the anterior band distally to the postmedian narrowed to a line; postmedian of both wings less strongly lobed behind middle.

India: Nainital, S.W. of Almora, at light, September 22, 1921 (H. G. Champion), type in coll. Oxford Museum.

20. *Eupithecia robiginascens* sp. n.

♂♀, 26–27 mm. Head and body above blackish fuscous, in places tinged with red-brown; beneath pale drab. Face with well-developed cone. Palpus rather short (little over 1), heavily scaled, 3rd joint quite short, concealed. Antennal ciliation in ♂ rather less than 1, in ♀ nearly $\frac{1}{2}$. Legs (especially fore-leg) darkened, with pale rings at ends of joints.

Forewing rather elongate, costa rather straight to well beyond middle, then gently curved; cinnamon (or, when quite fresh, inclining to tawny ochraceous), finely but densely irrorated with dark fuscous, except in the bands which bound the median area; cell-spot large, raised, long-oval, deep black; costal margin blackish fuscous, cut by a few pale dashes; blackish dashes on M and M^2 as

far as the postmedian, also on all the veins just proximally to the postmedian, elsewhere slighter; basal patch ill-defined, strongly angled outward in middle of cell, then strongly oblique inward; the cinnamon band beyond it narrow; median area over 4 mm. wide at costa, about 3.5 mm. at hindmargin, rippled with about 6 fine, ill-defined lines of dark irroration, the proximal ones parallel with subbasal, the distal angled about R^1 ; postmedian bounded by a faintly hoary line, which is oblique inward from costal (angled at SC^3), excurved at R^1 weak posteriorly; a fine dark line (obsolete posteriorly) separates this from the outer cinnamon or ochraceous band, which is rather broad at R^1 , then gradually tapers posteriorly; terminal area slightly darker than median; subterminal line in anterior half very fine, dentate, pale hoary greyish, posteriorly whiter, more lunulate, interrupted in cellule 2, conspicuous behind M^2 ; terminal line black, with slight hoary dots; fringe chequered.—*Hindwing* whitish drab anteriorly and apically, concolorous with forewing posteriorly; cell-dot moderate; M and M^2 dotted with blackish and whitish; postmedian vein-dashes, cinnamon outer band and whitish subterminal line developed in posterior part only, the band narrow; terminal line and fringe as on forewing.

Underside glossy pale drab; the veins with brownish dashes; cell-spots elongate; forewing (and hindwing more slightly) with black costal spots—subbasal, antemedian, postmedian, and one or two others in median area; the principal lines fairly well developed, except on forewing posteriorly.

Bhutan: Buxa (type in coll. Tring Museum); Sikkim; Khasia Hills; N.E. Burma,

21. *Chloroclystis* (*Gymnodisca*) *isophrica* sp. n.

♂♀, 22 mm. Head and thorax pale olive; two black dots between antennae and another on crown. Palpus in ♂ over $2\frac{1}{2}$, in ♀ $3\frac{1}{2}$; marked with dark fuscous on outside. Abdomen above in ♂ reddish, with narrow blackish-fuscous belts at ends of segments; in ♀ more broadly blackish-fuscous.

Forewing pale olive-green, in places irrorated with blackish-fuscous; markings mostly blackish-fuscous; costa with spots or dashes; an extremely fine, curved subbasal line; a narrow, somewhat interrupted, straighter band between this and median band, widest anteriorly; median band about 4 mm. wide, formed of partly confluent, rippled lines, leaving interruptions of the ground-colour, especially in a longitudinal direction in and outside cell (rather recalling *C. ruptiscripta* Warr., 1903—" *Rhinoprora* "); cell-dot almost lost in the band; the very fine, rippled white lines which bound the median band very gently curved throughout, otherwise unusually regular (only approached in the group by those of *rubrifusa* Warr., 1895); subterminal line fine, lunulate-dentate, slightly interrupted, accompanied proximally by a brown-red band, which is only black mixed between costa and SC^3 and at its extreme proximal edge and distal inter-neural teeth; a fine black terminal line; fringe with triangular blackish spots, which project their apices across the terminal line on to the veins.—*Hindwing* pale glossy drab, with feeble indications of the markings of underside; terminal line and fringe-spots as on forewing but weaker.

Underside glossy drab, costal margins slightly spotted or clouded; forewing with darker, gently curved, distally pale-edged postmedian line, proximally to which the ground-colour is slightly darkened; hindwing with small dark cell-dot, curved (and at R^3 very bluntly bent) postmedian line, weaker median

just outside the cell-dot and indistinct praesubterminal shade; terminal line and fringe-spots present.

Central Dutch New Guinea: Mt. Goliath, 5,000–7,000 feet, January 1911 (A. S. Meek), 1 ♂, 1 ♀, in coll. Tring Museum.

22. *Chloroclystis* (*Gymnodisca*) *hypodela* sp. n.

♂, 21 mm. At first sight very similar to the preceding, the shape and general coloration of forewing being nearly the same; evidently in reality nearer to *viridescens* Warr. (1895). Chiefly distinguished from *isophrica* as follows:

Face with a longer cone. Palpus stouter; not dark-mixed on outside, Abdomen dorsally more irrorated with black.—*Forewing* with cell-dot large, conspicuous; median band more broken, strongest in costal and hindmarginal spots at its proximal and distal extremities; postmedian line and pale band beyond much less regular, forming, in particular, an outward projection behind R^1 , the pale band finely bisected; subterminal line much less deeply dentate, its red proximal band obsolete, replaced by dark patches at costa and radials, and a much smaller one on M^2 ; fringe-spots not extending on to the wing.—*Hindwing* and underside paler, more strongly marked (the markings beneath mostly brown), postmedian line of hindwing more angulated on R^1 .

Central Dutch New Guinea: Mt. Goliath, January and February 1911 (A. S. Meek), 2 ♂♂ in coll. Tring Museum.

23. *Chrysoclystis perornata morbosa* subsp. n.

♂♀, 26–28 mm. Smaller than *p. perornata* Warr. (1896), the general coloration decidedly paler, the parts which in the New Guinea race are deep brownish vinaceous becoming here cinnamon-buff, the buff parts correspondingly paler; the strongly bent outer line of the forewing is continued further proximad in cellule 6, almost meeting the inner line.

Penang: Waterfall Valley, March 14—April 18, 1898 (Curtis), type in coll. Tring Museum. Also from Padang Rengas, Malay Peninsula, in the same collection (noted by Warren, Nov. Zool. iv, 228, as the corresponding ♂ to his original ♀♀) and from Bidi, Sarawak (C. J. Brooks) in coll. Joicey.

24. *Heterophleps bicommat* (Warr.).

Dysethia bicommat Warr., *Proc. Zool. Soc. Lond.*, 1893, p. 348 t. 32, f. 1. (Sikkim).

Mr. Warren founded this on two species and both his generic and his specific diagnosis give generally the ♀ characters first. Nevertheless, the generic conception—like most of Warren's—was based on the ♂ structure, as is shown especially by his later erection of *Dysethiodes* (Nov. Zool. ii, 106) and is supported by Hampson's sectionizing (*Faun. Ind. Moths*, iii, 335). Moreover, his ♀ was a specimen of *ocyptaria* Swinh. (*Ann. Mag. Nat. Hist.* (6) xii 157), while his ♂ has never received any other specific name. This ♂, too, is the specimen figured; although the figure looks ♀, a comparison with the two originals shows, even to the damaged abdomen, that it was taken from the ♂. I have therefore had no hesitation whatever in making the ♂ the holotype and transferring the ostensible allotype to *ocyptaria*. Both are in poor condition. The Naga specimens which Mr. Elwes (*Proc. Zool. Soc. Lond.*, 1893, p. 349) took to be the same species are again different and are described below.

25. *Heterophleps acineta* sp. n.

♂, 32 mm. Very much like small *ocyptaria* Swinh., but belonging to a different section in that the ♂ antenna is not pectinate, but bears on each segment two pairs of fascicles of slender cilia, which except at the distal end of the antenna are long and arise from rudimentary processes. Palpus short and rather slender.

Forewing shaped about as in *ocyptaria*, the termen perhaps slightly more sinuous than in the ♂ of that species; coloration the same; costal spots smaller and browner (less blackened); lines equally fine, antemedian fully as oblique to SM¹, postmedian much straighter, scarcely at all sinuous, reaching hindmargin near tornus.—*Hindwing* with costa rather less long than in *ocyptaria*, angles rather more rounded; abdominal area beneath less clothed with hair.

Assam: Naga Hills, 5,500–7,000 feet, August–October 1889 (W. Doherty), 2 ♂♂ in coll. Tring Museum.

Agrees with *bicommatata* Warr. (*vide supra*) in the antennal structure, but that species is longer-winged, with larger and darker cell-spot and costal patches, much less oblique antemedian line, sinuous postmedian, lighter and more sharply marked hindwing, etc. I have made the first comparison with the less closely related *ocyptaria* as being the better-known species and, moreover, occurring also in the Nagas.

26. *Syzeuxis* (?) *tessellifimbria* sp. n.

♀, 46 mm. At first glance suggestive of an overgrown *trinotaria* Moore, and so determined by Elwes (with query), Hampson (*Faun. Ind., Moths*, iii, 339), and Warren. Distinct in a considerable number of points. Palpus less long-scaled above.—*Forewing* with termen more regularly curved; a small proximal areole present; colour appreciably greener; costal edge less sharply marked with black and white; the two principal costal spots less triangular, more elongate, the first lines which run from them more excurved in cell and at radials, partly marked with darker brown; a small brown subterminal spot between R¹ and R²; fringe in proximal half continuously olive-grey, in distal pure white, dark-spotted opposite the veins.—*Hindwing* more elongate than in *trinotaria*; discocellulars biangulate; cell-dot present above; outer line fairly strong, curved rather than bent in middle; fringe without the blackish patches.—Underside with the postmedian line of forewing reaching hindmargin; fringes as above.

Sikkim: Tonglo, 10,000 feet, July 1886 (H. J. Elwes), type in coll. Tring Museum.

Should probably form a separate genus, but, as the areole certainly varies in the group,¹ it can remain here pending systematic revision.

27. *Syzeuxis magnidica* sp. n.

"*Aphantoloba nigrinotata* ♀" Warr., *Nor. Zool.* iii, 117 (1896) (nec ♂).

♂, 22–26 mm.; ♀, 25–30 mm. Less small than *nigrinotata* Warr.—*Forewing* with SC¹ well away from C (in *nigrinotata* touching or anastomosing slightly); ground-colour more uniformly buff, less mixed with whitish, the irroration more strigiform; costal spots larger, the antemedian developed into

¹ In *Cryptoloba minor* Warr. (figured by Hampson, *Faun. Ind., Moths*, iii, 336, fig. 166, as *aerata*) the areole is double; in the closely allied *aerata* Moore it is single.

a half-band, always crossing M , generally reaching or crossing M^2 , the shadowy brown antemedian line (band) behind it obsolete; postmedian crossing R^1 , often almost reaching R^2 , the shadowy band behind it straight and grey, not sinuous and brown, ending in a dark-fuscous dot on hindmargin.—*Hindwing* with C less closely approximated to cell than in *nigrinotata*; ground-colour rather less white; postmedian band not reaching costa; fringe infuscated between tornus and M^1 .—Underside also less whitish, the cell of the forewing with heavy smoky suffusion.

Assam: Khasia Hills, 2 ♂♂, 3 ♀♀, in coll. Tring Museum.

Warren had only his "♂ type" to represent *nigrinotata*, but mixed with it examples of the present species and of the following. The only other specimen of *nigrinotata* yet known to me is a ♂ from Loeboe Rajah, Sumatra, April–May 1897 (Ericsson), possibly a separable race.

28. *Syzeuxis seminanis* sp. n.

♂, 19–20 mm. In appearance intermediate between *nigrinotata* Warr. and *magnidica* Prout (supra), but differing from both in the presence of a small areole in the forewing.—*Forewing* less whitish-mixed than in *nigrinotata*, the irroration similarly fine, the bands similarly brownish, but rather finer and only a little sinuous, the postmedian at hindmargin with a few dark scales on each side; antemedian costal triangle shorter than in either of the closest allies, more as in *trinotaria* Moore; postmedian triangle narrow, but rather long, just crossing R^1 ; cell-dot wanting.—*Hindwing* coloured almost as in *magnidica*; cell-dot weaker; postmedian band reduced to a thick line, nearer to termen than to cell, reaching costa.—*Underside* coloured as in *magnidica*, on both wings with the postmedian thin; smoky suffusion in cell scarcely so strong as in *magnidica*.

Assam: Khasia Hills, March 1894 (type) and April 1894 (paratype), in coll. Tring Museum.

The presence of an areole in this species (though proportionally smaller than that of *trinotaria*) suggests that Hampson (*Journ. Bomb. Nat. Hist. Soc.* xii, 75) was right in sinking *Aphantoloba* to *Syzeuxis*, though he was seriously wrong in making *nigrinotata* a form of *trinotaria*.

29. *Dyspteris crispisulcans* sp. n.

♂, 35–38 mm.; ♀, 38–42 mm. Head green. Palpus in ♂ $1\frac{1}{2}$, in ♀ 2, 2nd joint above and beneath with rather long-projecting hair-scales. Antenna in ♂ with the pectinations rather short, in ♀ with the projections beneath not deep. Thorax and abdomen green, the latter with narrow whitish belts at ends of segments. Fore- and midlegs blackish on upperside.

Forewing moderately broad, though less so than in *breviataria* Hb. (*Zutr.* i, 29), the tornus being less square; bluish green, in places mixed with white, which becomes the predominant tone in the median area, except towards costa; a small white cell-spot; lines deeper green, edged with white on their reverse sides; antemedian acutely angled outward in cell, thickened at the angle so as to touch cell-spots; postmedian markedly irregular, rather sharply dentate outward on the veins, incurved between the radials and more slightly behind middle, anteriorly slightly more oblique than termen; subterminal line white,

irregularly dentate; conspicuous white vein-spots between this and termen; fringe green proximally, white distally.—*Hindwing* in both sexes narrow, the apex slightly more rounded than in *breviataria*; DC in ♀ biangulate; first line wanting; the rest nearly as on forewing.

Underside similar; median area of forewing less white; white markings of hindwing more or less widened.

E. Peru: Huancabamba, Cerro de Pasco (E. Boettger), type and another ♂; Cuzhi, Prov. Huanuco, 1,900 m. (W. Hoffmanns), 1 ♂, 1 ♀. S.E. Peru: Chirimayo, 1,000 feet, July 1901 (G. Ockenden), 1 ♀. All in coll. Tring Museum.

30. *Trichopterigia spheorrhyma* sp. n.

♀, 39 mm. Face whitish. Palpus 1 $\frac{3}{4}$; 2nd joint blackened on outside. Vertex whitish, with some black scales in centre. Thorax and abdomen whitish, irrorated and spotted with black, the abdomen dorsally with longitudinal black marks, subdorsally with some darkening at ends of segments.

Forewing white, irregularly irrorated with pale brownish buff (perhaps more olive-buff in bred specimens), the basal area more deeply soiled with this colour; markings black; a small cell-mark; subbasal line sharp, very oblique outward to an acute tooth on SC, thence nearly vertical to hindmargin but with a tooth outward at M and a faint inward curve behind it; two ill-defined (only in part black-irrorated) lines between this and median area, gently excurved anteriorly, the outer one strengthened with short wedges on the veins; antemedian line from about $\frac{2}{3}$ costa to middle of hindmargin, lunulate-dentate and double from costa to base of M², thence single, thicker, dentate, the tooth inward at fold rather long, the outward tooth on SM² deeper black; postmedian fine, from $\frac{5}{11}$ costa, vertical to C or SC, excurved outside cell-dot, with a blacker mark about DC¹, then more blurred by accompanying black irroration, posteriorly becoming again deep black, with an angle inward at SM², then very oblique outward to hindmargin; indications of a duplicating line outside the postmedian, then a characteristic series of dashes or wedges on the veins; proximal subterminal interrupted, notably in cellule 6, most distinct as a streak from costa to SC⁵ and some marks between the radials, in both these places irregularly duplicated distally; a faint brownish-grey shade close to termen (strongest anteriorly), crossed by fine black dashes on the veins; termen with paired black dots at the veins; fringe white, marked, especially opposite the veins, with blackish.—*Hindwing* white, but thinly scaled, the distal half with some brown-grey irroration, which tends to form a rather distally placed postmedian line (strongest on veins) and still weaker subterminal shades; terminal dots weaker than on forewing.

Forewing beneath more smoky, indefinitely marked; a white band proximally to the subterminal shades. Hindwing more nearly as above or slightly cleaner white.

Kashmir Valley, 7,000 feet, June 1903 (Col. Ward). Type in coll. Tring Museum, paratype in coll. L. B. Prout.

31. *Pachrophylla aorops* sp. n.

♂, 31–33 mm. Face with rough projecting hair-scales. Palpus 2, 2nd joint heavily scaled above and beneath, 3rd joint small, concealed. Antenna

pubescent. Thorax with slight posterior crests. Abdomen slender, slightly elongate. Head and body concolorous with wings; foreleg above banded, blackish and pale.

Wings not narrowed, being slightly broader than in the group of *minor* Butl. (1882).—*Forewing* with costa markedly shouldered at base, then straightish almost to apex, apex squared, termen bowed, scarcely oblique anteriorly, moderately so posteriorly; brown, closely irrorated in different shades, the prevailing impression being of Verona brown, clouded—especially in median area—with dark grey; costal margin, especially in median area, somewhat paler, cut by dark dashes; a small but slightly elongate dark cell-mark, set in an elongate, narrow pale ocellus, which extends for the length of DC^{2+3} and is continued narrowly on DC^4 ; slighter pale vein-dots elsewhere; dark markings scarcely developed; a thick, outwardly oblique subbasal indicated from costa to M; boundaries of the median area still more vague, the postmedian rendered more traceable by indications of a duplicated interrupted pale line beyond, which is more or less incurved at the radials and at fold; subterminal line distinct, whitish, consisting of interneural dashes or shallow lunules accompanied by slight dark shading; termen with paired blackish dots; fringe rather pale distally.—*Hindwing* with the lobe reaching to slightly beyond middle of abdominal margin, divided from the rest of the wing by a small rounded bay much as in *minor*; C anastomosing with SC to near end of cell, SC^2 rather long-stalked, DC^2 oblique and somewhat incurved, considerably longer than DC^4 , an appreciable angle at origin of R^2 , M^1 widely separate, M^3 wanting; light drab, somewhat whiter at base and costally.

Underside glossy drab, the hindwing a little lighter.

Chili (V. Izquierdo), type in coll. L. B. Prout; (W. B. Calvert) a worn ♂ in coll. Tring Museum; Mulehen, January 1902 (H. J. Elwes), a ♂ in coll. British Museum.

Differs from true *Pachrophylla* in having C of hindwing anastomosing instead of connected with SC.

32. *Hoplosauris analogica* sp. n.

♂, 37 mm. Face whitish, narrowly mixed above with black, lower extremity wholly black. Palpus $1\frac{1}{4}$, with very small terminal joint; 2nd joint blackened on outside. Head and body predominantly drab, the head and front of thorax mixed with grey; thorax with rather strong dark posterior crest; abdomen slender and rather elongate, rather pale beneath.

Forewing elongate but rather broad, the termen being long, obliquely curved, apex fairly sharp; light brown, somewhat variegated, most tinged with cinnamon-drab or fawn in median area and with a slight flush in the pale area beyond; a conspicuous black streak from apex to the subterminal line at R^1 , constricted at apex and in middle, rather more steep than the streak of typical *Anaitis*; pattern consisting of a large number (about 16) of somewhat sinuous dark-brown lines, a few of them—notably two at proximal side of median area and the middle two of the four at its distal side—fused into extremely narrow bands; subbasal line from costa at 4 mm. to hindmargin at nearly 3, slightly incurved in cell, indented on M; median band about 6 mm. wide at costa, 3.5 mm. at hindmargin, its distal side only very feebly outbent near costa and behind R^2 ; subterminal whitish line and the dark ones proximal to it somewhat more

lunulate, rather irregular, the proximal two rather strong, filled up between the radials so as to suggest the common "twin spots" of the *Larentiinae*; terminal line blackish, at intervals curving inward so as to enclose pale terminal spots; fringe with a pale basal line and pale tips, a thick dark central line intervening. — *Hindwing* quite small, but relatively elongate; cell little over $\frac{1}{2}$, DC almost vertical; C rather widely separate from SC, the usual connecting bar obsolete or quite slender, rather proximal, SC² long-stalked, R² central, M¹ stalked, M² wanting; abdominal margin with basal lobe vestigial; dirty white, slightly more drab distally.

Forewing beneath glossy drab, with indications of the median band, especially its distal edge. Hindwing dirty whitish.

Patagonia: Valley del Lago Blanco, Chubut (Thursby), type in coll. Tring Museum, together with a second ♂ and a ♀ with the median band rather more darkened. The ♀ with C of the hindwing anastomosing, DC biangulate, M¹ separate.

The shape and pattern of the forewing superficially recall an *Anaitis*. Butler's worn type of *heliconoides* (1882) seems so similar, except in its much paler colour, that, allowance being made for the great variability of many Chilean species, I would have treated this as an aberration or local modification but for the appreciably shorter palpus and the stalking of M¹ of the ♂ hindwing.

33. *Graphidipus clavistigma* sp. n.

♂, 37–39 mm. Smaller than *graphidiparia* Oberth. (1883); body and wings darker, approaching the coloration of *subpisciata* Dogn. (1903); collar, as in the latter, orange.

Forewing with the black costal spots rather regular; antemedian band blurred, but nearly uniform in development throughout, not (as in *graphidiparia*) thickened and strengthened anteriorly; median shade single, or only faintly duplicated proximally, passing quite near the cell-mark, curved rather than angled about R¹; the double postmedian line less macular than in *graphidiparia*; a thick mark on fold in median area, recalling the claviform stigma of the *Noc-tuids*. — *Hindwing* rather more noticeably produced at tornus than in the allies; thinly scaled, less pure white than in *graphidiparia*, the border narrowly smoky, extending somewhat inward on the veins; obscurely darker terminal vein-spots, extending on to proximal part of fringe.

E. Bolivia: Buenavista, July–October 1906 (J. Steinbach), 5 ♂♂ in coll. Tring Museum.

34. *Graphidipus mediata* sp. n.

♂♀, 38–41 mm. Intermediate in colour between *clavistigma* (supra) and *graphidiparia*. Collar pale.

Forewing with a drab tinge; costal maculation nearly as in *graphidiparia*; markings linear rather than macular, mostly thin and rather indistinct, the antemedian band and median line much as in *clavistigma*; median mark on fold not developed. — *Hindwing* in ♂ intermediate between those of the species named; in ♀ more smoky, with the dark border broadened.

Ecuador: Quito (W. Goodfellow), 3 ♂♂ in coll. Tring Museum.

35. *Graphidipus alternans* sp. n.

♂, 40 mm. Close to *pisciata* Guen. (1858), from Brazil, perhaps a race. —*Forewing* with the ground-colour slightly darker and more slaty; black wedge-spots on veins as strong as in *pisciata*; the intermediate areas (between basal spots and first band, on each side of median area and in costal half between median and postmedian) strongly spotted with orange at veins and costa; first band (between basal and median areas) broader than in *pisciata*; the curved median line only developed between costa and M. —*Hindwing* also slightly darker and more slaty than in *pisciata*.

E. Peru: Huancabamba, Cerro de Pasco (E. Boettger), type in coll. Tring Museum.

36. *Graphidipus subpisciata flavirivulata* subsp. n.

♂. *Forewing* rather darker than in *s. subpisciata* Dogn. (1903), from Bolivia, the pale parts more tinged with orange. —*Hindwing* considerably darker than in that race.

Argentina: Tucuman (type and others); Salta (J. Steinbach); La Rioja (E. Giacomelli). Type in coll. Tring Museum.

I have adopted a manuscript name of Warren's for this race.

37. *Crocypus perlucidaria macroleuca* subsp. n.

♂♀. *Forewing* in proximal part less white-mixed than in *p. perlucidaria* H.-Sch. (1855), almost concolorous with the distal part; the white subapical band broader and longer, extending from the costa (though usually leaving the extreme costal edges black) to about 1 mm. from termen. —*Hindwing* with the proximal part similarly less white-mixed.

Costa Rica to Panama, the type from Sitio, Costa Rica, June (W. Schaus) in coll. Tring Museum.

38. *Steirophora acrolophites* sp. n.

♂, 40 mm. Head olive-greenish. Palpus 1½, 1st and 2nd joints slightly dark-marked on outside, the 2nd with projecting scales above, 3rd joint elongate. Thorax above olive-greenish, the posterior crests blackened; abdomen, body beneath and legs browner and paler. Foretibia and tarsus darkened, with pale segmental rings; mid- and hindtibia with the spurs present, though minute; a very long and strong pencil from femoro-tibial joint; basal abdominal plate ample.

Forewing rather pale green, copiously marked with dusky brown; basal area spotted and bordered (more broadly anteriorly than posteriorly) with this colour, edged by a whitish-green line which is angled outward in base of cell; succeeding area rippled with darker and lighter lines, the former (especially at costa and about the veins) mixed with dusky brown; median band just over 7 mm. wide at costa, 4 mm. at hindmargin, somewhat rippled with ground-colour, bordered by crenulate white-mixed lines, the antemedian very gently curved, the postmedian gently incurved between costa and R¹, where it projects slightly, thence approximately parallel with termen, only slightly curved near hindmargin; an ill-defined anterior patch of the ground-colour in centre of band,

broadest in middle ; a crescentic black cell-mark at distal edge of pale patch, constricted or almost interrupted in middle ; distal area with irregular, partly interrupted lines of brown and green, the brown strengthened proximally to the subterminal line, especially in a quadrate radial blotch ; subterminal line white-mixed, somewhat excurved between SC^3 and R^1 , slightly lunulate-dentate behind, running to tornus ; a rather dark admixture outside it between the radials ; terminal dark vein-spots rather large ; fringe weakly chequered.—*Hindwing* light drab, decidedly tinged with cinnamon ; an indistinct pale curved post-medial line or narrow band, still less clearly defined distally than proximally.

Both wings beneath more nearly as hindwing above, but warmer in colour, more approaching tawny-olive, the forewing in addition with distinct traces of the markings of the upperside and with the costal edge on proximal half alternately pale and dark in short streaks.

Java : Gedeh, 7,500 feet, 25 June 1910 (E. A. Cockayne), type in coll. L. B. Prout, kindly presented by the discoverer.

Near *punctatissima* Warr. (1897), from Celebes ; termen of forewing not quite so straight and oblique, antemedial line less direct, spurs of hindtibia not so completely atrophied, etc.

39. *Megaloba melanconia* sp. n.

♂, 34 mm. Head and body green, the body beneath pale. Palpus over 3. the exposed terminal joint about half as long as diameter of eye. Hindtibia rather more swollen than in typical *Megaloba*.

Forewing with termen rather more oblique posteriorly than in typical *Megaloba*, tornus more rounded ; prevailing tone glossy yellowish olive, the markings formed of condensed black irroration, in places with an admixture of red ; the pale bands bounding the median area more glossy, mostly olive-yellow, in places suffused with the more olive shade ; basal patch ill-defined, marked with red at hindmargin ; a narrow, somewhat sinuous band between this and median fascia, strongest between cell and SM^2 ; median fascia about 6 mm. wide at costa, 3 mm. at hindmargin, relieved with the ground-colour anteriorly and round the rather elongate black cell-mark, its proximal edge moderately sinuous, its distal very gently curved—outward in anterior part and inward in posterior ; some ill-defined dark markings on the narrow praesubterminal band, especially in cellules 7, 5, and 4 ; subterminal line weakly defined distally by some interneural olive lunules, the terminal area mostly as pale as the subterminal ; dark marks at termen in the form of flattened V's, their apices on the extremities of the veins (fringe mostly wanting).—*Hindwing* nacreous white-grey, feebly dark-shaded at the borders ; the proximal fold of the lobe blackish on upperside : a large oval blackish patch of specialised sealing, proximally entering the cell (but narrowing), anteriorly crossing the stalk of SC^2-R^1 , distally about 2 mm. from the termen, posteriorly reaching R^3 .

Underside glossy greyish, the forewing with an elongate pear-shaped patch of black-brown, densely packed androconial sealing behind and just entering the cell, obviously correlated with the blackish patch of hindwing above ; ground-colour whiter around this patch.

British New Guinea : Hydrographer Mountains, 2,500 feet, May 1916 (Eichhorn Bros.), type in coll. Tring Museum.

40. *Asthenes aurantiaca* sp. n.

♂, 27 mm. In shape and structure akin to *argentipuncta* Warr. (1906). Head and body orange, body beneath and at anal tuft paler; abdomen with the dorsal spots tinged with grey, but quite inconspicuous, not metallic.

Forewing with the pale yellow ground-colour almost entirely obscured by band-like orange-buff clouding, only remaining visible in a series of about 7 irregular lines; the proximal 3 only slightly wavy; the 4th (apparently bounding proximally the rather narrow median area) rather more indented anteriorly and posteriorly; indications of additional lines or spots in median area; 5th line (postmedian) highly sinuous, being markedly incurved between the radials and still more deeply indented between M^1 and SM^2 ; the 6th approximately parallel with the 5th, but more dentate and interrupted; the subterminal more weakly lunulate-dentate, close to termen at SM^2 and at M^1 , slightly receding between them and again anteriorly; only a few scattered silvery scales; fringe yellow, mixed with orange.—*Hindwing* concolorous; antemedian line rather thick, angled outward at M ; postmedian at least as zigzag as on forewing, more proximal; outer lines rather interrupted and indefinite.

Underside duller, more weakly marked with orange, especially so the hindwing.

Central Dutch New Guinea: Mount Goliath, about 139° longitude, 5,000–7,000 feet, February 1911. type ♂ in coll. Tring Museum.

41. *Bihastina mera* sp. n.

♂♀, 20–23 mm. Quite near the other species (*albolucens* Prout 1916, *subviridata* B.-Bak. 1915, and *viridata* Warr. 1906). Upper part of face less olive than in *albolucens* and *viridata*, purer red-brown. Thorax and abdomen white, only quite weakly dotted and spotted above with olive-grey.

Forewing fully as short and broad as in *viridata*, termen from apex to R^1 even less oblique, excision between the radials shallower; purer white than in *albolucens*, the markings similarly olive-grey; some dark spots or longitudinal dashes on costa; a weak subbasal line; a stronger, thicker line at about $\frac{1}{4}$, excurved to base of M^2 , and slightly exangled at SM^2 ; a weaker duplicating line proximally; some slight irroration in proximal area; a narrow band just beyond middle, rather better defined than that of the allies, but traversed by white dots and more or less interrupted in cellule 2; the white bands on either side of it broad and clean, the distal unmarked, the proximal with an excessively fine intersecting line, which is angled outward at SM^2 so as to join the median band; subterminal and terminal markings much as in *albolucens*; fringe white, only very feebly mottled.—*Hindwing* with the terminal tooth less extremely long than in the allies; proximal part clean white; median band continued in middle of wing, consisting posteriorly of three lines (only the proximal one strong), which anteriorly fuse together, more or less; subterminal and terminal markings much as in *albolucens*, but rather stronger.

Underside white, with the principal markings more or less strongly reproduced, often weakening posteriorly.

British New Guinea: Hydrographer Mountains, 2,500 feet, April–May 1918 (Eichhorn Bros.), 4 ♂♂, 2 ♀♀, in coll. Tring Museum.

42. *Poecilasthena limnaea* sp. n.

♂♀, 23–26 mm. Related to *thalassias* Meyr. (1891).—*Forewing* whiter, the lines olive-grey, not green, all more or less strengthened at costa, in part dark-dotted on the veins; postmedian group rather sharply angled outward in front of R^1 ; fringe clouded with olive-grey, with rather large clean white interneural spots in proximal part.—*Hindwing* with termen appreciably more crenulate than in *thalassias*, the tooth at R^3 longer; coloration as on forewing; postmedian (median) group of lines appreciably angled outward about R^1 and between R^3 and M^1 .

Dutch New Guinea: Mount Goliath, about 139° longitude, 5,000–7,000 feet (A. S. Meek), 2 ♂♂, 2 ♀♀ in coll. Tring Museum; Mt. Kunupi, Weyland Mountains, 6,000 feet (Pratt Bros.), a larger form in coll. Joicey.

43. *Asthenotricha tripogonias* sp. n.

♂, 34 mm. Antenna simple. Head and body light brown, mixed with red; abdomen irrorated with black, a white dorsal mark at end of each segment.

Forewing with termen slightly waved; long dense masses of suberect red hair from costa, overhanging cell above and beneath; pale wood-brown, beyond the postmedian scarcely, proximally thereto densely, irrorated with red; postmedian at about $\frac{2}{3}$, crenulate, gently curved, rather less oblique than termen; distal area with minute grey dashes on veins; terminal line red; fringe dark grey, with a pale line at base.—*Hindwing* with termen subcrenulate; the hair-pencil rather large, red; postmedian line nearly central, darker grey posteriorly; the red flush chiefly behind cell, but continued appreciably to termen; distal area and fringe as on forewing.

Underside, excepting the posterior part of forewing, heavily irrorated with black, the proximal area still more heavily than the distal.

Réunion, May 28, 1922 (G. F. Leigh), type in coll. Tring Museum.

A most striking species, on account of the additional hair-tufts. 3 ♀♀ which probably belong to it (April 25, April 30, and May 28, 1922, G. F. Leigh) are darker and more uniformly rufous, with black irroration, more conspicuous black cell-dots above and beneath, a bent antemedian line, traces of other lines proximally, the postmedian triple; veins distally more strongly light- and dark-dotted than in the ♂.

SUBFAM. GEOMETRINAE

44. *Cosmethis teleleuca* sp. n.

♂, 42 mm.; ♀, 46–48 mm. Head and thorax, with 1st segment of abdomen, blackish; abdomen otherwise cadmium yellow, the extreme tip in ♂ mixed with black-grey.

Forewing with costal margin in ♂ markedly convex opposite outer part of cell, then faintly concave for a short distance, the upperside between the convexity and the cell and distally for some distance clothed with coarse hair, the underside from the concavity to near apex fringed costally with closely-laid hair; in ♀ only a little sinuous; SC^{1-2} coincident and (as usual in the group) nearer to SC^1 than to C, sometimes connected with the former between SC^3 and SC^4 by a short bar; dark neutral grey, heavily clouded with black, in the darkest examples almost unicolorous, in the less dark showing a lightening of

the veins, of parts of the proximal area and of a narrow band edging the postmedian distally; cell-spot rather large, round, deep-black; lines black, the subbasal acutely angled in cell, the antemedian rather less acutely, the postmedian excurved a little beyond the cell-spot, gently incurved posteriorly; a roundish white subapical spot between SC^2 and R^1 , slightly flattened at its posterior side, distally only about 1.5–2.5 mm. from termen.—*Hindwing* with termen slightly prominent at SC^2 , not convex (but slightly sinuous) to R^1 , then more rounded; concolorous with forewing the paler specimens showing a thin antemedian and thicker, more sinuous postmedian, the latter accompanied distally by a pale band; in addition, a vague series of blackish spots beyond, separated by the paler veins and edged distally by a somewhat dentate grey line, proximally by a finer, less dentate one.

Underside blackish, with only the subapical white spot of forewing present.

New Britain: Talasea (A. F. Eichhorn), 3 ♂♂, 2 ♀♀; also 1 ♂ from New Ireland. All in Coll. Tring Museum.

45. *Craspedosis gyroleuca brachytone* subsp. n.

♂♀. *Forewing* with the oval white patch reduced, anteriorly not crossing R^1 , posteriorly as a rule terminating at M^2 , occasionally with a very short and narrow extension behind that vein, in any case not reaching nearly to the fold.—*Hindwing* also with the white patch slightly reduced, separated from the abdominal margin by a broader and more solid black area.

New Britain: Talasea, January–April 1925 (A. F. Eichhorn), 14 ♂♂, 4 ♀♀. Type in coll. Tring Museum.

46. *Buzura recursaria deprunescens* subsp. n.

♂, 68–74 mm. Abdomen rather whiter than in *r. recursaria* Walk., from India.—*Forewing* with ground-colour much whiter than in *r. recursaria*, almost without brown suffusion, the warm brown basal and subapical-costal patches in consequence much more sharply differentiated; antemedian line rather more oblique inward from costal margin and again from SM^2 to hindmargin; postmedian (except costally and at hindmargin) and subterminal very weakly expressed.—*Hindwing* with cell-spot smaller than in *r. recursaria*.—Underside with only the (sharply blackish) cell-spots, the (small) subapical spot and slight costal commencement of postmedian line of forewing present.

British New Guinea: Kumusi River, low elevation, May 1907 (type).

Dutch New Guinea: Ninay Valley, Central Arfak Mountains, 3,500 feet, November 1908–January 1909, 1 ♂. Both in coll. Tring Museum.

47. *Xandrames cnecozona* sp. n.

♂, 74 mm. Near *latiferaria* Walk. (*List. Lep. Ins.* xxi, 445). *Forewing* with the median shade rather broader; the outer pale band more tinged with brown, with a dark spot in its proximal part on R^1 .—*Hindwing* slightly more elongate in middle, the termen being more strongly rounded; the white subterminal line anteriorly a little farther from termen, the terminal space beyond it—especially in anterior half—rather lighter and more ochreous brown.

Underside very distinct from that of *latiferaria* in that the white band is replaced by a buff-yellow one, as bright as in *albofasciata* Moore (*Proc. Zool.*

Soc. Lond., 1867, p. 635, t. xxxii, f. 5) and continued narrowly at termen of hind-wing—anteriorly circ. 4 mm. wide and clean, posteriorly to R^1 rather narrower and much blurred with the ground-colour.

Borneo: Kina Balu (J. Waterstradt), 1 ♂ in coll. Tring Museum.

Possibly a race of *latiferaria*, though the antennal pectinations look scarcely so long.

48. *Ectropis repleta* sp. n.

♀, 32–34 mm. Close to *duplexa* Moore, 1888 (Nepal to N. Burma).—*Forewing* more densely irrorated with black, which in the median area tends to condense into a longitudinal streak in front of M ; no enlarged costal spots at origin of lines; antemedian line sharply expressed, regularly and rather strongly curved, the dark shade which in *duplexa* generally accompanies it proximally reduced to a single spot between M and fold; postmedian rather less deeply incurved behind R^3 than in *duplexa*, the dark shading beyond mostly suppressed, on the other hand forming between R^3 and M^1 a conspicuous blackish spot which reaches the subterminal; subterminal and its proximal dark shading well developed, also with small distal spots between the radials, these, however, not extending to termen as in *duplexa*.—*Hindwing* with termen slightly more crenulate than in *duplexa*; irroration, except at costal margin, much stronger; a subconcave median shade developed in posterior half of wing, somewhat recalling that of *ochrifasciata* Moore.

Underside greyer than in *duplexa*, more strongly marked, at least on hind-wing, where the median line is complete.

N.W. India: Murree, type in coll. British Museum (ex Harford coll.), paratype, 7,500 feet, June 1918 in coll. Agric. Res. Inst. Pusa (ex Dutt coll.); Dalhousie, in coll. British Museum (ex Harford coll.); Simla, July 1909, in coll. L. B. Prout (per favour of Prof. T. B. Fletcher).

49. *Cleora polymiges* sp. n.

♂, 27–32 mm.; ♀, 33 mm. Face with appressed scales; blackish fuscous. Palpus fully $1\frac{1}{2}$; 2nd joint with dense appressed scaling, 3rd joint minute; blackish fuscous, paler at tip and in a stripe on innerside. Tongue short and extremely slender. Antenna in both sexes bipectinate nearly to apex, the branches in the ♂ very long, in the ♀ about 3. Head and body concolorous with wings, fillet paler. Hindtibia not dilated, the spurs long.

Forewing rather broad, costa arched near base and distally, apex rounded, termen nearly smooth, little oblique and little curved anteriorly, much more so in posterior half; SC^{1+2} stalked, their stalk connected or anastomosing at a point with C , R^1 well separate, R^2 rather before middle, M^1 well separate; fovea in ♂ rather strong; ground-colour pale, almost entirely clouded with olive (sometimes rather greyer) and pale cinnamon-rufous or vinaceous-rufous, the rufous shades appearing chiefly along the principal veins, about the middle of R^1 and between R^3 and M^2 as far as the postmedian, but not sharply defined nor very constant; irroration blackish; a black hindmarginal spot close to base; cell-mark elongate, but weak or obsolescent; lines black, lunulate-dentate; antemedian rarely well defined, strongly excurved anteriorly, then oblique inward, almost touching fovea; an ill-defined shade or duplicating line proximally to

it; median rather thick and about vertical from midcosta, weaker and sharply outbent between the radials, then oblique inward; postmedian finer and stronger, less strongly outbent at radials than the median, further from the latter anteriorly than posteriorly, behind M^2 slightly incurved; subterminal formed of small white or whitish teeth, rather irregularly developed, proximally filled-in with dark dots, the tooth in cellule 3 replaced by a small but fairly conspicuous white spot; terminal black spots fairly strong, somewhat elongate; fringe with blackish dots opposite the veins.—*Hindwing* rather ample, apex well expressed, termen rather full, strongly rounded, slightly waved; concolorous with forewing, markings similar, the cell-mark rather larger, the median proximal to it, slender, the subterminal generally rather more uniform.

Forewing beneath drab-grey, inclining to ecru-drab or with a tinge of vinaceous; costal edge buff, with dark dots; black spots at origin of median and postmedian lines; these (especially the median) more direct than above, the median sometimes weak; a pale line outside the postmedian; antemedian obsolete, subterminal faint; terminal spots and fringe nearly as above. *Hindwing* slightly paler, with cell-dot and lines well developed (more or less); the postmedian generally rather thick, more distal than above.

The single ♀ is rubbed, especially on forewing, but evidently much darker, the olive being replaced by dark slate-grey.

Madagascar: Diego Suarez, March, April, July, August, September 9 a short series, the type dated July 24. In coll. Tring Museum, collected by G. Melou.

This seems to be a third species of the group of *proëmia* Prout (1917) and *euplates* Prout (1925), nearer to the latter in shape, but with the rounded apex of the forewing giving it an even stumper appearance. The termen "suberect" (Hampson, *Faun. Ind. Moths*, iii, 144) and the mottled wings rather recall *Grophos*, "*Hypochrosis*" *suffusata* Pagenst. (Voeltzkow's *Reise*, ii (2), 64, t. ix, f. 7) may be related.

50. *Medasina firmilinea* sp. n.

♂ 52–56 mm.; ♀, 54–61 mm. Near *mucidaria* Walk. (1866), perhaps a form, though intermediates are not yet known. Ground-colour slightly paler or less brown, mixed with whitish, less coarsely irrorated.—*Forewing* with cell-spot narrower or less diffused; lines stronger; postmedian not or hardly incurved between M^2 and SM^2 ; median shade straighter behind the anterior angle, in general less approximated to the antemedian.—*Hindwing* with the postmedian line similarly strengthened.—Underside with the lines also present, the dark subterminal band (variable in *mucidaria*) always strongly developed on both wings.

Assam: Shillong, September–November 1893, 5 ♂♂, 3 ♀♀ in coll. Tring Museum, the type dated November; also a ♂ from the same locality, October 7, 1924 (T. B. Fletcher), in coll. Agric. Res. Inst., Pusa.

51. *Semiothisa khasiana vehemens* subsp. n.

♂. Ground-colour above warmer than in *k. khasiana* Moore (1888), from N. India, more as in *elvirata* Guen.; distal area clouded with more or less deep violet-grey, also much as in the latter species; double postmedian line of hind-

wing rather less curved, consequently reaching abdominal margin rather nearer to tornus. Underside yellow ochre, clouded with ochraceous orange, as in *elvirata*; distal cloudings more blackish than in that species, variable in strength.

Perak: Jor Camp, 2,000 feet, at light, August 24, 1922 (E. Seimund), type in coll. British Museum, presented by the Federated Malay States Museum. Mount Tahan, Malay Peninsula, 1 ♂ in coll. Tring Museum. Sumatra: Lebong Tandai, Benkoelen (C. J. Brooks), 1 ♂ in coll. Joicey.

The less crenulate hindwing, without prominent tooth at SC², as well as the development of the characteristic white spots of the forewing above and beneath, shows that this is not a race of *elvirata*, with which its colouring would have associated it, but of *khasiana*.

52. *Nadagarodes subpulchrata* Warr. and *purpuraria* Warr.

The genus *Nadagarodes*, so common on New Guinea and its satellite islands, seems to have reached on the Solomons its extreme limit of distribution and to maintain itself with difficulty. At any rate the two indigenous species are at present very rare; indeed, the fine Meek collections from the group have produced only six specimens in all. As Mr. Warren failed to get a grasp of them, some rectification is necessary.

The smaller species (42–45 mm.) evidently represents *duplicipuncta* Warr. (1899), though I do not think it will prove a mere subspecies. It can be distinguished at a glance, apart from its size, by its crenulate and curved postmedian line. In the large species (54–56 mm.) this line is virtually straight on both wings. The ♀ of the former was named *subpulchrata* in 1902 (Nov. Zool. ix, 369, Guadalcanar); the ♂ of the latter *purpuraria* in 1905 (Nov. Zool. xii, 436, Choiseul). A third name, *pulverata* (Nov. Zool. xii, 435, Choiseul), was founded on a confusion of the two, namely a ♂ of *subpulchrata* wrongly associated with a ♀ of *purpuraria*, and must be dropped altogether. Its description is badly arranged inasmuch as the ♂ is described first while the ♀ was intended to be the type, as is shown by the order "1 ♀, 1 ♂" at the bottom of the page and confirmed by the type label. There is a further error as regards the measurement of the ♂, which is first correctly given as 44 mm., but subsequently as 40 mm. Any supposed virtue that might reside in page-priority is therefore more than counterbalanced by the desirability of founding a species not only on the ♂ but still more on a definite zoological conception; moreover, in this instance a rigid application of page-priority would bring about a like result, for the *first* "*pulverata*" described (i.e. the ♂) would sink to *subpulchrata* and the name would not be available for a second. I subjoin the correct synonymy and list of specimens.

(1) *N. subpulchrata* Warr. 1902 (♀) = "*pulverata* ♂" Warr. 1905 (nec typ.). N. Choiseul, 1 ♂; S. Choiseul, 2 ♂♂; Guadalcanar, 1 ♀ (type).

(2) *N. purpuraria* Warr. 1905 (♂) = *pulverata* Warr. 1905, sens. str. (♀). S. Choiseul, 1 ♂ (type); N. Choiseul, 1 ♀ (type of *pulverata*).

53. *Nadagarodes tentilinea* sp. n.

♂♀. 40–43 mm. Near *mysolata* Walk. (1866). Head and body coloured about as in the darkest ♀♀ of that species, the ♂ abdomen above being mixed with ochraceous posteriorly.

Forewing pale violet-grey (whitest between median and postmedian lines), with dark-grey irroration; costal edge ochre, with scattered black dots: lines bright ochraceous; antemedian curved anteriorly; median straight; postmedian much less curved anteriorly than in *mysolata*, accompanied proximally by a heavy black line, which only weakens at costa; subterminal pale line accompanied proximally by a moderate shade (grey mixed with ochreous); apex slightly lightened; fringe orange-ochraceous.—*Hindwing* with termen little waved, the angle at R³ more pronounced than in *mysolata*; as forewing, without first line.

Underside as in *mysolata*, probably equally variable in details.

New Hanover, April 1923, type ♂, and March 1923, 1 ♀ (A. F. Eichhorn), February–March 1897, 2 ♀♀ (Webster). All in coll. Tring Museum.

Distinguished by the straight lines and the sharply defined black of the postmedian, as well as by the almost complete lack of sexual dimorphism.

54. *Euipe undulataria plumbocaerulea* subsp. n.

♂♀. Both wings above strongly glossed with bright plumbeous (almost blue); the white parts of central area rather clean in the ♂ and well indicated even in the ♀, that of the forewing, however, in both sexes generally only well expressed from R³ to M² or at farthest to the fold. Basal area of hindwing, on the other hand, rather darker than in the New Guinea forms, especially beneath.

Bismarck Archipelago: New Ireland, November 1923, 5 ♂♂ (with type), 2 ♀♀; New Hanover, February–March 1923: 2 ♂♂, 6 ♀♀; Rook Island 4 ♂♂, 2 ♀♀; ? Dampier Island, 1 ♂ (worn). All in coll. Tring Museum, collected by A. F. Eichhorn.

Euipe undulataria was founded by Pagenstecher (*Jahrb. Nass. Ver. Nat.* xxxix, 160, t. x, f. 1) on ♀♀ from Aru (*loc. typ.*) and Amboina, and is widely distributed from the Moluccas to Goodenough Island. I believe it may be separable into two races, but I have seen very few examples from the Moluccas and none from Aru, so cannot pursue the question further; in any case the above differentiation separates *u. plumbocaerulea* from both.

55. *Euipe fictaria* sp. n.

Luziaria fictaria Walk. MS., in coll. Oxford Museum.

"*Euipe phalarota* Meyr." Swinh., Cat. Lep. Het. Oxf. Mus. ii, 266 (1900) indescr. (nec Meyr.).

♂♀, 34–37 mm. Near *undulataria* Pagenst., but scarcely a race. Termen of forewing in ♂ strongly, in ♀ appreciably concave; in the ♂ this concavity reaches from close to apex to M², in the ♀ it fades out about R³, ♂ with the white median patch of forewing wanting, the white band of hindwing irrorated with dark scales. ♀ more uniformly black-grey than that of *undulataria*. Both sexes beneath with the white apical patch reduced to a subapical dash, running in from termen behind SC⁵, at its proximal end confluent with a remnant of the white subterminal, so as to form a posteriorly directed crook.

Borneo: Sarawak, the type ♂ and a ♀ in coll. Tring Museum; Labuan, Natuna Islands: Bunguran, Malay Peninsula: Gumong Ijau, Singapore, a good series in coll. British Museum.

If it be held that Swinhoe's citation of *fictaria* as a *Euipe* from Borneo and Singapore is sufficient indication to establish the species, he can be cited as

author and the date given as 1900. Personally I hold that some attempt at diagnosis is requisite, but I admit that there is no other known Malayan species which an entomologist of Swinhoe's capabilities could well have confounded with *phalarota*. As to the genus *Euipe* Meyr. (1886), I am not sure that it is more than a section of *Luxiaria* Walk. The features which characterise *phalarota*—second joint of palpus slender, with small terminal tuft on upperside directed obliquely forward, M^1 of hindwing stalked or connate, hindtibia of ♂ without hair-pencil, its terminal spurs obsolete, first tarsal joint with long spinules—are indeed marked enough, but they all tend to become less pronounced as one proceeds westward in the study of the group. How similar the two genera can be in facies is shown by the fact that Warren (1903) has described a true *Luxiaria* as "*Euipe*" *inferna*.

It is necessary to add that Meyrick's genotype is a ♂, not a "♀" as indicated. The species is only known from the Solomons and (in a perhaps separable race) from Rossel Island.

56. *Luxiaria subrasata rescripta* subsp. n.

♂. Forewing on an average not quite so narrow as in *s. subrasata* Walk., from Borneo. Both wings above less suffused with slaty grey, generally less weakly marked. Underside much less dark than in *s. subrasata*, cinnamon or ochreous-tawny (in *s. subrasata* deep orange-cinnamon to Mikado brown, with greyer suffusions), tending to become paler outside the subterminal band.

♀. Subterminal band above more fawn, less smoky, beneath less broad and dark than in *s. subrasata*.

Throughout New Guinea and the D'Entrecasteaux Islands, the type ♂ from Upper Aroa River, British New Guinea, end of January 1903 (A. S. Meek) in coll. Tring Museum.

57. *Eutoea heteroneurata bismarckensis* subsp. n.

♂. More tinged with brown, especially on forewing beneath, than typical *heteroneurata* Guen. (= *tephrosiata* Guen., vide Prout, Nov. Zool. xxxii, 62), the area outside the oblique line on forewing conspicuously browner, the oblique line itself on both wings thickened.

♀. Slightly less yellow than in the ♀ of typical *heteroneurata*; distal area of both wings with broad suffusions nearly reaching termen, on the upperside smoky (mixed brownish and grey), on the underside more vinaceous-cinnamon or hazel, though sometimes with grey admixture; the characteristic pair of dark subterminal spots at R^2 of forewing obsolete on upperside, rather weak on underside.

Bismarek Archipelago: New Hanover, February–March 1923, 5 ♂♂, 3 ♀♀ (*loc. typ.*); New Ireland, January 1924, 1 ♂; New Britain, January 1925, 3 ♂♂, 2 ♀♀; Rook Island, August 1913, 1 ♂.

58. *Syrrhodia campylogramma* sp. n.

♂♀. Intermediate between *lutea* Stoll and *rubricata* Warr. (vera), the black-tipped costal hair-pencil of hindwing being as strongly developed as in the former, while the reduction in size, the almost smooth (scarcely waved) termen of the

♂ hindwing, strongly curved median line of forewing, and anteriorly strongly bent postmedian point to a clear affinity with the latter. I recognise two races :

S. c. campylogramma, ♂♀, 34–37 mm. In size and general tone of colouring closely like *rubricata*. Distinguishable, apart from the ♂ hair-pencil, by the more truncate apex of the hindwing of the ♂ and by the still more strongly curved median shade of the forewing. The markings on an average stronger, median shade of forewing commonly thickened, dark costal shade outside the postmedian generally well developed, especially in a blackish spot behind SC², postmedian of hindwing generally rather more distally placed than in *rubricata*.

Dammer, December 1898 (H. Kühn), a good series. Wetter, May 1892 (W. Doherty), 2 ♂♂, May 20, 1900 (H. Kühn), 1 ♀. Dutch Timor : Oinanisa, November–December 1891 (W. Doherty). 1 ♂. Portuguese Timor : Suai, January 15–21, 1923 (E. Wahr), 1 ♂. Teoor, November 5, 1899 (H. Kühn), 1 ♀. Little Key, November 21, 1897 (K. Kühn), 1 ♂, January–March 1895 (H. C. Webster), 1 ♀. Type ♂ (Dammer), in coll. Tring Museum.

The ♀ is dimorphic in colour, like that of *rubricata*.

S. c. sumbensis subsp. n. ♂♀, 38–41 mm. Markings as in the preceding subspecies. ♂ above more mixed with yellow, often quite like a small *lutea* ; beneath predominantly yellow, as in *lutea*. ♀ apparently always yellow, resembling a small strongly marked *lutea* except in the shape of the lines.

Sumba (W. Doherty and Everett), a good series in coll. Tring Museum.

S. rubricata Warr. vera (Nov. Zool. v. 35), referred to above, cannot be regarded as a race of *lutea* Stoll, but rather as a representative species, having the hair-pencil of hindwing considerably reduced, predominantly pale ochreous, only black-mixed at the tips ; the series in coll. Tring Museum is from Cedar Bay, Geraldton, and "N. Queensland." Later (Nov. Zool. xi. 491, September 1904), Warren confounded with it a smoother, less densely irrorated species, without the hair-pencil, which species has been bred in numbers by Mr. F. P. Dodd at Townsville, and named an aberration of it "ab. *decolor*." A little later in the same year Turner (*Tr. Roy. Soc. S. Austral.* xxviii. 236) validly named the same species *metabolis*. As aberrations have no necessary status in scientific nomenclature and *decolor* was associated with a misidentified species, I am not prepared to sink *metabolis* to it.

59. *Syrrhodia lysima* sp. n.

♂, 35 mm. ; ♀, 41 mm. Closely similar to *campylogramma sumbensis* Prout (supra) or the yellowest aberrations of *rubricata* Warr., but without the ♂ hair-pencil ; postmedian line of forewing not quite so markedly bent as in the two species named, inclining to revert to the form of that of *lutea* Stoll, the maculation outside it very weak, in the ♀ almost entirely obsolete ; postmedian of hindwing rather more bent about R²–M¹ than in the allies ; underside with cell-dots generally weak or obsolete.

Sudest Island, January–May 1916 (Eichhorn Bros.), type ♂ and allotype ♀ ; Woodlark, March–April 1897 (A. S. Meek), 2 ♀♀ ; Dampier Island, February–March 1914, 1 ♂ ; Manus, Admiralty Islands, September–October 1913, 1 ♂ (ab. or race, rather larger and redder) ; New Hanover, February–March 1897 (Webster), 1 ♀ ; Feni Island, E. of New Ireland, May 1924 (A. F. Eichhorn), 1 ♀.

The few specimens yet known to me from the Solomons are not enumerated

above, as they will probably prove racially separable, but are mostly ♀♀ (Bougainville, 2 ♂♂, 1 ♀; Choiseul 1 ♀; Guizo, 2 ♀♀; Rendova, 1 ♀).

60. *Zeheba respectabilis* sp. n.

♂, 46 mm.; ♀, 42 mm. Close to *spectabilis* Butl. (*Proc. Zool. Soc. Lond.* 1877, p. 474), perhaps a race.—*Forewing* in ♂ rather less fleshy tinged; in both sexes with the tooth at R³ rather longer; cell-mark broader; lines less sinuous, notably the postmedian, which in the ♂ forms an extremely gentle, almost regular curve between SC and the hindmarginal spot, while even in the ♀ the outward sinus behind R³ is quite weak.—*Hindwing* with the terminal teeth stronger than in *spectabilis*; cell-dot sharply black; postmedian line corresponding to that of forewing.—♀ beneath with the broad outer band much blackened.

Solomons: Vella Lavella, March 1908 (A. S. Meek), 2 ♂♂, 1 ♀, in coll. Tring Museum.

61. *Krananda extranotata* sp. n.

♂♀, 50–59 mm. Near *vittraria* Feld. (*Reise Novara, Lep. Het.* t. cxxviii, f. 32) Larger. General tone paler, the semihyaline areas being less tinged with cream-colour, the distal area greyer, less tinged with buff-pink, especially on the hindwing.—*Forewing* with the termen slightly more oblique, apex rather more produced, at least as extreme as in *semihyalina* Walk., from India; postmedian line at least as straight as in *vittraria*, the outward bend behind R³ being very slight or almost wanting; anterior subterminal spots enlarged, but indistinct, the area outside the subterminal being almost equally pale; a blackish shade proximal to the subterminal from middle of cellule 2 to tornus (only weakly suggested in the allies), particularly strong at M², on which it forms an acute proximal projection.—*Hindwing* with postmedian line almost straight from costa to fold, wanting the proximal bend at SC²–R¹; subterminal spots enlarged, notably those in cellules 6 and 3.

Dutch New Guinea: Ninay Valley, Central Arfak Mountains, 3,500 feet, November 1908–January 1909 (*loc. typ.*). British New Guinea: Biagi, 1 ♂; Hydrographer Mountains, 2 ♀♀; Mt. Kebea, 1 ♂; Dinawa, 1 ♂. Type in coll. Tring Museum.

62. *Anonychia strebla* sp. n.

"*Anonychia violacea* Moore" Hmps., *Faun. Ind. Moths*, iii. 178 (1895) (ex err.).

♂♀, 31–38 mm. Head and body concolorous with wings.

Forewing coloured nearly as in *violacea* Moore (1888), but with slightly less of the purplish suffusion; some vague dark basal and subbasal shading or irroration; antemedian line pale-edged proximally, formed much as in *lativitta* Moore (1888)—almost at right-angles from costa to fold, here strongly bent or curved, to run obliquely inward—but with a very slight additional tooth outward at cell-fold, superficially accentuated by a thickening of the line; cell-dot rather large; median line generally weak; postmedian with a long prong outward on R², often as acute as in *rostrifera* Warr. (1888), sometimes slightly blunter at extremity, deeply incurved between this and a second, blunter projection at

fold; subterminal shades much as in *violacea*.—*Hindwing* paler than in *violacea*, with indications of small cell-dot and irregular postmedian.

Forewing beneath, as in the allies, paler, greyer, and very weakly marked, only at apex concolorous with hindwing. Hindwing brownish, irrorated, with large cell-dot and rather strong, thick postmedian line, slightly outbent in middle, then slightly incurved, on the veins accentuated, between them slightly indented.

Sikkim: Tonglo, 10,000 feet, July 1886 (H. J. Elwes), 4 ♀♀, including the type; Jongri, 11,000 feet, 1 ♀; Bhutan, August 1888 (O. Möller), 2 ♂♂ in inferior condition; Buxa (?), 1 ♂ also defective and rather aberrant.

63. *Scardamia aetha* sp. n.

♂, 28 mm. Face and palpus rather dark red-orange ("English red"). Vertex, upperside of thorax and base of abdomen above brighter (flame-scarlet); abdomen posteriorly fading out through duller, more vinaceous red to whitish. The glossy crests normal. Body beneath cream-colour, the foreleg mostly reddened.

Forewing salmon-orange or orange chrome, with very dense, largely confluent dull-red strigulation and in places (chiefly about the posterior half of distal area) with faint suffusion of grey or drab; proximal part of costal region brighter, flame-scarlet; cell-mark and lines indistinct, greyish; antemedian dentate outward on M and SM² and more weakly on SC, little sprinkled with silvery scales; postmedian fine, almost straight, 3.5 mm. from termen, its proximal silvery scaling rather incomplete; fringe dull red.—*Hindwing* concolorous; abdominal edge and fringe cream-colour; cell-dot minute, blackish; antemedian line wanting; postmedian slightly more proximal than on forewing, very little curved, reaching abdominal margin 2 mm. from tornus; fringe as on forewing.

Underside cream-colour, the forewing mostly flushed with pink except behind fold, the hindwing faintly irrorated with pink, at least anteriorly; postmedian line pink, not very sharp; fringes flushed with pink.

♀, 27–35 mm. Proximal costal region of forewing as in ♂, the upperside otherwise largely suffused with purple-drab; lines darker than in ♂, the postmedian accompanied distally by a narrow plumbeous or violet-grey band. Underside entirely suffused with dull pink (orange-vinaceous to Congo pink).

British New Guinea: Biagi, 5,000 feet, March 1906 (A. S. Meek), type ♂ and 5 ♀♀; Angabunga River, 1 ♀. Dutch New Guinea: near Oetakwa River, 3,500 feet, 1 ♀ (all the foregoing in coll. Tring Museum); Mt. Kunupi, Weyland Mountains, 6,000 feet, November 1920—January 1921 (Pratt Bros.). 4 ♀♀ in coll. Joicey.

64. *Plutodes philornis* sp. n.

♂, 33 mm. Closely akin to *flavescens* Butl. (Hampson, *Faun. Ind. Moths*, iii, 162, fig. 89, as *discigera* form).—*Forewing* with SC¹ from cell; basal patch shorter (about as in *exquisita* Butl.); distal patch rather smaller, not extending behind M², the line on it quite differently formed, showing a single outward angle on R², with a bold inward curve before and behind, the figure forming—when viewed from the distal margin—the conventional "flying bird."—*Hind-*

wing with the silvery line which bounds the basal and abdominal patch not straight, but running rather obliquely towards the abdominal margin as far as submedian fold, then bending so as to become exceedingly oblique (almost parallel with that margin), until its termination near tornus; the abdominal marginal patch consequently extremely narrow except basally; distal patch smaller than in *flavescens*, anteriorly not reaching SC^2 ; the line on it formed essentially as on forewing, but looking much more asymmetrical, on account of the proximity of R^2 (the radial fold) to anterior margin of patch.

Assam: Khasia Hills. Type in coll. L. B. Prout, two paratypes in coll. Joicey.

65. *Plutodes chlidana* sp. n.

♂, 26–27 mm. Face orange. Palpus yellow, mixed—especially at extremity—with orange. Vertex and front of thorax pale yellow. Meso- and metanotum cinnamon-rufous suffused with plumbeous; abdomen above cinnamon-rufous; anal tuft yellow; body beneath yellow.

Wings Naples yellow, mixed with brighter yellow, which becomes deep chrome costally; the patches cinnamon-rufous to orange-rufous, edged with metallic plumbeous, the distal ones somewhat shaded with lilac-grey in the middle.—*Forewing* with basal patch 2 mm., bounded anteriorly by M; distal patch broad egg-shape, its narrower end close to apex, its greatest length 6 mm., its anterior side following SC^1 , then curving away to DC, its posterior almost reaching fold then curving so that its plumbeous ring touches termen in cellule; the dark traversing line nearly central, only once outbent.—*Hindwing* with the proximal patch extending along abdominal margin for 6 mm., not quite regularly tapering, being a little constricted at about $\frac{2}{3}$; distal patch mid-terminal, its greatest length 4 mm. (from near SC^2 to M^2), its proximal side gently convex, its distal gibbous.

Underside pale, more primrose-yellow; costal margin of forewing nearly as above; proximal patch of forewing greyish, of hindwing mostly buff-yellow; distal blotches largely slate-colour, with a proximal crescent of pale grey mixed with buff-yellow.

♀ similar, but with the thorax, abdomen, and blotches above purple-grey, almost heliotrope-purple.

Rossel Island: Mt. Rossel, November–December 1915, 2 ♂♂, 6 ♀♀ (A. S. Meek), in coll. Tring Museum.

The ♀ is very like that of *signifera* Warr. (1896), which reaches Sudest Island without appreciable modification; smaller, the distal blotches smaller, especially that of hindwing. The ♂ is very different from that of *signifera*.

66. *Plutodes polygampta* sp. n.

♂♀, 24–30 mm. General coloration nearly as in the preceding and with similarly slight sexual dimorphism in colouring; the blotches in both sexes a little lighter and brighter. Very distinct in having the proximal patch enlarged into a highly irregular figure which reaches the proximal plumbeous ring of the outer patch at M^1 – M^2 ; on the forewing, the posterior edge of the enlarged patch follows the hindmargin for about 4 mm., then bends obliquely forward and subsequently runs parallel with M at about 1.5 mm. distant, the anterior edge throws out a large central lobe much as in *drepanephora* Prout (1915) and *connexa* Warr.

(1906) ; on the hindwing, the connective portion is 1 or 2 mm. wide and runs in virtually from the end of the abdominal streak. Further, the distal patch is rather different from that of *chlidana*, its proximal edge on forewing having a small excavation, its anterior edge on hindwing a small projection.

Rossel Island : Mt. Rossel, 5 ♂♂, 5 ♀♀, with the preceding, of which it seems scarcely possible it can be a remarkably stable dimorph.

67. *Plutodes separata epiphora* subsp. n.

♂, 30 mm. ; ♀, 34-38 mm. Generally larger than *s. separata* Warr. (1907), the blotches relatively larger (especially the distal), more definitely edged with blackish-leadens ; distal blotch of forewing nearly always with a nipple at its posterior end (behind fold), that of hindwing not (as in *s. separata*) straightish proximally, but convex, though with a slight indentation at radial fold.

Dutch New Guinea : Mt. Goliath, January-February 1911, 1 ♂, 7 ♀♀.

The ♀♀ are dichromatic, 3 being coloured about as in *s. separata* ♀, the other 4 as in *s. s. ab. pallidior* ♂.

68. *Zamarada calypso* sp. n.

♂♀, 24-28 mm. Head, with palpus, bright ochreous, irrorated or spotted (the vertex sparingly or scarcely) with walnut-brown. Antennal shaft ochreous ; pectinations in ♂ long, in ♀ moderately so (about 5), the inner series (as usual in the group) sharply dark-spotted. Thorax above heliotrope-purple, abdomen a little duller and with a posterior ochraceous-buff spot or dot on each segment ; anal extremity and underside of body buff or somewhat ochreous. Hindtibia of ♂ not dilated.

Forewing with termen straightish anteriorly, curved in middle, moderately oblique ; translucent yellow-green (almost sulphur-yellow), with sparse, irregular, minute purplish strigulae, which become dense in abdominal region except near base and near the postmedian line ; costal margin deep chrome, scarcely dark-spotted ; a small, ill-defined basal patch of heliotrope-purple ; a small black cell-dot ; distal border mostly dark (a blend of pinkish flesh-colour and purple in varying intensity), bordered proximally by a black line (or brown densely dusted with black) ; width of border anteriorly 3 or 3.5 mm., posteriorly scarcely less, in middle not quite 1 mm., the bay of the ground-colour between R^1 and M^1 therefore rather deep, its angles proximally on these veins rather sharp, its distal end little narrower than its proximal, the angles here more rounded off, especially the anterior one ; the subterminal wedge-marks brown, black-mixed, rarely very sharp, their pale distal edging slight ; an ill-defined blackish cloud along R^2 in distal area ; terminal brown line overlaid (with only slight interruptions) with black ; fringe spotted.—*Hindwing* similar (except costa), the basal patch very small, the postmedian line with an appreciable sinus outward in cellule 6, in addition to the large central one.

Underside with the borders darker and more uniform.

Madagascar : Diego Suarez, February-May 2, 1917, June-August 1917 (G. Melou), a short series in coll. Tring Museum.

The July-August specimens, to some extent also the June ones, are of an aberration with the purple colour in the border duller, darker, and heavier. I have seen a large form of this species from Central Madagascar in coll. Kenrick.

69. *Lomographa* (*Heterostegane*) *contessellata* sp. n.

♀, 21–27 mm. Smaller than *subtessellata* Walk. (*List Lep. Ins.* xxvi, 1648). Body and wings more deeply coloured (tawny-ochraceous), the front of thorax and base of costal margin of forewing suffused with blackish.

Forewing with median line thicker (especially at costa) and slightly less straight than in *subtessellata*, more noticeably bent at the bifurcation of R^2-M^1 ; postmedian slightly outbent at R^1 , thence straightish or faintly concave, less oblique than termen, at hindmargin definitely oblique *outward*; subterminal without the posterior blotch of Walker's species.—*Hindwing* with costal margin not whitened; postmedian quite different from that of *subtessellata*, lacking the subcostal blotch and the deep radial bay; subterminal much nearer the termen than in *subtessellata*, its dark radial spot replaced by a slight distal streak running to the termen, as in *urbica* Swinh. and *lala* Swinh.

Underside with the subterminal developed into a dark band, which is faintly indicated also on upperside as a dusky shade proximal to the line.

Borneo: Penungah, December 20, 1893, and January 1894 (type); Tenom (E. Wahr). Penang, 1897 (Curtis). W. Sumatra: Benkoelen (Ericsson). All in coll. Tring Museum. Singapore and Baram (N. Borneo) in coll. British Museum. Benkoelen in coll. Joicey.

It is strange that neither Hampson nor Warren should have noticed the very considerable differences between this species and the Indian *subtessellata*, which varies very little except in size (24–32 mm., generally 28–29). Hampson (*Faun. Ind. Moths*, iii, 165) merely remarks that “the Bornean form is darker.”

70. *Leucetaera lucifera mixoleuca* subsp. n.

♀, 33–35 mm. Differs from *L. l. lucifera* Warr. (Nov. Zool. x, 385), from Dutch New Guinea to Goodenough Island, in having the ground-colour white, without the pearl-grey and lavender-grey reflections, the irroration less dense than in normal *l. lucifera*, the markings slightly browner.

New Britain: Talasea, January–February 1925 (A. F. Eichhorn), 3 ♀♀ in coll. Tring Museum.
